

KCC 4771 (K-C 17,182)
PATENT

REMARKS

Claims 19 and 25 are amended herein. Claims 3, 19-23, and 25 are currently pending. The following remarks are responsive to the Office action dated February 24, 2005.

Response to Objections to the Specification

In response to paragraph 3 of the Office action, the previously submitted amendment to the Abstract removing the term "said" is resubmitted herein on a separate page. Accordingly, entry of the amendment to the Abstract is requested.

At paragraph 5 of the Office action, the Office takes the position that the amendment to the paragraph at page 27, line 2 (at lines 25-31 thereof) made in applicants' Amendment B filed February 20, 2004 introduces new matter into the disclosure. Applicants respectfully disagree. Those of ordinary skill in the art are well aware of what materials are elastomeric and nonelastomeric. Nevertheless, Applicants have amended the specification to accommodate the Examiner's objection in order to expedite prosecution. The specification simply lists suitable retractive materials (identified as such in the original application) without characterizing it as elastomeric or nonelastomeric.

In view of the above, the specification is submitted to be in proper form.

Response to Rejection of Claims Under 35 USC §102

Claim 19

Amended claim 19 is directed to a hook and loop mechanical fastening system for an article in which the loop component of the fastening system is mountable on the article and is capable of elastic stretching (e.g., elongating upon application of an elongating force and subsequent retraction upon removal or reduction of the elongating force) in at least two directions

KCC 4771 (K-C 17,182)
PATENT

(e.g., a machine direction and a cross-machine direction of the loop component). In at least one of the directions, the loop component is capable of stretching at least to 2.0 times its relaxed length. The loop component is constructed of a neck-stretched non-woven material attached directly to an elastic substrate that is elastically stretchable in at least two directions. The resulting loop component is also capable of elastic stretching in at least two directions. Moreover as claimed (a mechanical fastening system), the loop component and hook component can be mated for secure engagement.

Specifically, claim 19 recites a mechanical fastening system for an article wherein the mechanical fastening system comprises:

a) a loop component mountable on the article and capable of elastic stretching in at least two directions, said loop component being capable of being elastically stretched in at least one of the directions at least about 2.0 times a relaxed length of the loop component, said loop component comprising a neck-stretched non-woven material and an elastic substrate, said elastic substrate being elastically stretchable in at least two directions, said non-woven material being attached directly to the elastic substrate; and

b) a hook component mountable on the article and capable of fastening engagement with the loop component to secure the article in a fastened configuration;

c) whereby when the hook component is juxtaposed and engaged with at least a portion of the loop component, the loop component is stretchable during limited movement of the loop component relative to the hook component.

Claim 19 is submitted to be patentable over the references of record, and in particular U.S. Patent No. 5,910,136 (Hetzler et al.), for the same reasons as set forth in Amendment F dated December 9, 2004. That is, whether considered alone or in combination with the other references of record, Hetzler et al.

KCC 4771 (K-C 17,182)
PATENT

fails to show or suggest a mechanical fastening system including a loop component that is mountable on an article, capable of elastic stretching in at least two directions, and is elastically stretchable to at least 2.0 times a relaxed length in at least one of the directions, and is constructed of a neck-stretched non-woven material attached directly to an elastic substrate.

The Examiner, as set forth in the last sentence of paragraph 8, page 4 of the Office action, relies on the teachings at column 7, lines 20-36 of Hetzler et al. as disclosing a loop component that is elastically stretchable to at least twice a relaxed length. Hetzler et al. defines "elastic" as any material that is elongatable to a length at least about 150 percent of its unbiased length. In other words, Hetzler et al. defines "elastic" as any material that can be stretched at least about 1.5 times a relaxed length. Using the actual example provided in Hetzler et al. (rather than a stated range not supported by examples), a 1-inch sample of elastic material can be stretched to 1.5-inches, which is 1.5 times the original, relaxed length of 1-inch and not 2.0 times as recited in amended claim 19. Thus, Hetzler et al. does not disclose or suggest an elastic material that is elastically stretchable to at least 2.0 times its relaxed length.

As explained on page 35, line 26 through page 36, line 15 of the present application, one embodiment of the present invention can be stretched to a length about 200 percent of its initial, relaxed length. In the example provided in the application, the composite material (i.e., non-woven material and elastic substrate) has a relaxed length of 110 cm and is stretchable in the machine direction to 220 cm. Thus, the stretched length is 2.0 times the relaxed length. Claim 19 has been amended to state "2.0" rather than "two" to emphasize the difference between 1.5 times the relaxed length in the prior art, and 2.0 times the relaxed length in the claimed invention.

KCC 4771 (K-C 17,182)
PATENT

Claims 3, 20-23, and 25 depend directly or indirectly from amended claim 19 and are submitted to be unanticipated by and patentable over the Hetzler et al. and the other references of record for the same reasons as amended claim 19.

In addition, claim 25 requires the loop component to be able to elastically stretch in at least one of the two directions 2.5 times its relaxed length. As explained on page 36, line 20 through page 37, line 26 of the present application, another embodiment of the present invention can be stretched to a width about 250 percent of its initial, relaxed width. In the example provided in the application, the composite material (i.e., non-woven material and elastic substrate) has a relaxed width of about 100 cm and is stretchable to a width of about 250 cm. Thus, the stretched width is 2.5 times the relaxed width.

Hetzler et al. and the other references of record fail to show or suggest this additional feature. Accordingly, claim 25 is submitted as patentable for this additional reason.

Response to Rejection of Claims Under 35 USC §103

Amended claim 19 is also non-obvious in view of the combination of U.S. Patent No. 5,883,028 (Morman '028) with Hetzler et al. since there is no suggestion or teaching found in either Morman '028 or Hetzler et al. that would motivate one skilled in the art to replace the loop fastener of Hetzler et al. with the laminate disclosed by Morman '028. As explained in detail in Amendment F, neither of the references teaches the desire to provide a multi-direction elastically stretchable loop component to thereby increase engagement with the hook component.

In addition, amended claim 19 requires that the loop component is capable of being elastically stretched in at least one of the directions at least about 2.0 times a relaxed length of the loop component. As mentioned above, Hetzler et al. defines "elastic" as any material that can be stretched at least

KCC 4771 (K-C 17,182)
PATENT

about 1.5 times a relaxed length. Morman '028 defines "elastic" at column 2, lines 58-67 (as cited by the Examiner) as any material that is elongatable to a length at least about 160 percent of its unbiased length. In other words, Morman '028 defines "elastic" as any material that can be stretched at least about 1.6 times a relaxed length. Using the actual example provided in Morman '028 (rather than a stated range not supported by examples), a 1-inch sample of elastic material can be stretched to 1.6-inches, which is 1.6 times the original, relaxed length of 1-inch and not 2.0 times as recited amended claim 19. Thus, Morman '028 and Hetzler et al., whether considered alone or in combination, fail to teach or suggest a loop component that is able to elastically stretch 2.0 times its relaxed length.

As a result, amended claim 19 is submitted to be non-obvious and patentable over the references of record.

Claims 3 and 20-23 and 25 depend directly or indirectly from amended claim 19 and are submitted to be nonobvious and patentable over the references of record for the same reasons as claim 19.

In addition, claim 25 requires the loop component to be able to elastically stretch in at least one of the two directions 2.5 times its relaxed length. As mentioned above, Hetzler et al. and Morman '028 define "elastic" as any material that is elongatable to a length at least about 150 and 160 percent of its unbiased length, respectively. Thus, Morman '028 and Hetzler et al., whether considered alone or in combination, fail to teach or suggest a loop component that is able to elastically stretch 2.5 times its relaxed length.

Accordingly, claim 25 is submitted as patentable for this additional reason.

KCC 4771 (K-C 17,182)
PATENT

CONCLUSION

In view of the above, applicants respectfully request favorable consideration and allowance of claims 3, 19-23, and 25.

Respectfully submitted,



Kurt F. James, Reg. No. 33,716
SENNIGER POWERS
One Metropolitan Square, 16th Floor
St. Louis, Missouri 63102
(314) 231-5400

KFJ/PEB/bcw

Via Facsimile 703-872-9306